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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,175	06/21/2000	ARIANTO DARMAWAN	39629/DEP/R1	7850

7590

06/04/2003

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EXAMINER
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CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 06/04/2003

31

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-31

# Office Action Summary

Application No.  
09/582,175

Applicant(s)  
Darmawan

Examiner  
Ivars Cintins

Art Unit  
1724



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Mar 10, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 6-11 and 15 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 9-11 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on Mar 10, 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s).        |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s).         | 6) <input type="checkbox"/> Other:  |

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Applicant's response filed March 10, 2003 includes a proposed drawing correction, labeling figures 1, 2a, 2b, 3a and 3b as prior art; and deleting certain reference numerals from figures 5, 6, 7 and 8. This proposed drawing correction is hereby approved. Accordingly, items "(1)" and "(3)" of the objections to the disclosure, contained in the previous Office action, have been overcome by this proposed drawing correction.

As to item (2) of the objections to the disclosure in the previous Office action, Applicant should note that the proposed drawing correction filed February 12, 2002, requesting the cancellation of figures 10A-11B and replacing figure 12 with new figure 10, was not approved (see the Office action dated May 8, 2002; Paper No. 19). However, Applicant's statement on page 5, first full paragraph, of the above noted response has been treated as a request to cancel figures 10, 10a, 10b, 11a and 11b; which request is hereby approved. Also, Applicant should note that page 16, line 6, of the specification still refers to figure "11b" of the drawings, which reference should be deleted.

As to item (4) of the objections to the disclosure in the previous Office action, Applicant has correctly pointed out that nozzle equipped upper beds 104 and 105 have backwashing outlet ports 111 and 112 located therebelow; and therefore, objection

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"(4)(a)" is hereby withdrawn. It is noted, however, that Applicant refers to page 11, lines 24-25, of the specification for descriptive support of these nozzle beds, whereas this support appears on page 12, lines 14-15 of Office copy of this specification. Applicant should ensure that the Office copy and Applicant's copy of the specification are the same, in order to avoid any problems with future amendments and/or arguments. Also, as to item (4)(b) of the objection to the disclosure, Applicant has deleted the recitation of a lower fluid inlet port from claim 6. Applicant should note, however, that this lower fluid inlet port is still being recited in claims 10 and 11.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9-11 and 15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The term "backwashing the resin at the second compartment ... through the inlet port at the first compartment" (claim 9, lines 8-10) is somewhat indefinite as to the manipulative step intended. Applicant is advised that an amendment changing "at" (first occurrence) to --- in ---; and

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changing "at" (second occurrence) to --- of --- would overcome this portion of the rejection. Also, the term "the U-tube inlet port" (claim 10, lines 5-6 and 9-10; and claim 11, line 6) no longer has antecedent basis in the claims, in view of the amendment to parent claim 6, and is therefore indefinite. Claim 15 fails to end with a period, and is therefore somewhat indefinite.

Claims 6-8 are allowed because the references of record do not teach or fairly suggest a liquid separation apparatus having a column comprising a partition dividing the column into two vertical compartments joined at their lower ends to form a U-tube portion therebetween, wherein each compartment includes: an upper fluid inlet port; an upper bed proximate to the upper end of the compartment and below the fluid inlet port, and having fluid distribution nozzles; an outlet port for backwashing which is disposed adjacent to and below each upper bed; and an ion exchange resin layer with a free board between the top of the resin layer and the upper bed, such that the resin can expand and contract during a liquid separation process.

Claims 9 and 15 would also be allowed if rewritten or amended to overcome the above rejection under 35 U.S.C. § 112.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins

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whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (703) 308-1261.

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
June 1, 2003